Aspects of quality of primary care provided by physicians certified in phytotherapy in Switzerland

Melzer, J ; Saller, R ; Meier, B

Abstract: BACKGROUND: Data on the use of phytotherapy in primary care are scarce and difficult to compare (e.g. different health-care systems, study designs). OBJECTive: Are there differences in Switzerland regarding demographic data, practice structure, process of care and outcome/ treatment satisfaction between primary care physicians certified in phytotherapy (CAM) and physicians performing conventional primary care (COM) and their patients? MATERIAL AND METHODS: Subgroup analysis of the data of phytotherapy of an observational study (2 cross-sectional surveys with 3 questionnaires) which was performed as part of a nationwide evaluation program on complementary medicine (PEK). A descriptive analysis was used to compare data. RESULTS: In survey A, 20 CAM and 191 COM physicians participated, of which 14 and 84, respectively, continued for survey B and recruited at least 276 CAM and 1,395 COM patients. Findings show that CAM physicians had less technical equipment (e.g. x-rays) than COM physicians, their consultation time was 25% longer, and they used more non-drug therapies. Whereas in the SF-36 no differences could be identified between the groups, the EUROPEP showed significant differences in favour of CAM patients. CONCLUSIONS: Preliminary data of the comparison between CAM and COM physicians indicate few differences in demographic and practice structure data. Yet, due to differences in the process of care CAM patients showed better treatment satisfaction than COM patients. This is probably due to their doctors' communicative qualities and patient-oriented skills. To which degree this might be triggered due to phyto-pharmacosemiotic aspects needs to be investigated in a future study.

DOI: https://doi.org/10.1159/000122031

Forschende Komplementärmedizin
Wissenschaft • Praxis • Perspektiven

Original Article · Originalarbeit

Forsch Komplementärmed 2008;15:82–88
DOI: 10.1159/000122031

Published online: April 10, 2008

Aspects of Quality of Primary Care Provided by Physicians Certified in Phytotherapy in Switzerland

Jörg Melzer[a] Reinhard Saller[a] Beat Meier[b]

[a] Institute of Complementary Medicine, Department of Internal Medicine, University Hospital Zurich, Switzerland
[b] Zurich University of Applied Sciences (ZHAW), Inst. of Biotechnology, Phytopharmacy, Waedenswil, Switzerland

Key Words
Phytotherapy · Herbal medicine · PEK · Cohort study · Primary care · SF-36 · EUROPEP · Pharmacosemiotics

Summary
Background: Data on the use of phytotherapy in primary care are scarce and difficult to compare (e.g. different health-care systems, study designs). **Objective:** Are there differences in Switzerland regarding demographic data, practice structure, process of care and outcome/treatment satisfaction between primary care physicians certified in phytotherapy (CAM) and physicians performing conventional primary care (COM) and their patients? **Material and Methods:** Subgroup analysis of the data of phytotherapy of an observational study (2 cross-sectional surveys with 3 questionnaires) which was performed as part of a nationwide evaluation program on complementary medicine (PEK). A descriptive analysis was used to compare data. **Results:** In survey A, 20 CAM and 191 COM physicians participated, of which 14 and 84, respectively, continued for survey B and recruited at least 276 CAM and 1,395 COM patients. Findings show that CAM physicians had less technical equipment (e.g. x-rays) than COM physicians, their consultation time was 25% longer, and they used more non-drug therapies. Whereas in the SF-36 no differences could be identified between the groups, the EUROPEP showed significant differences in favour of CAM patients. **Conclusions:** Preliminary data of the comparison between CAM and COM physicians indicate few differences in demographic and practice structure data. Yet, due to differences in the process of care CAM patients showed better treatment satisfaction than COM patients. This is probably due to their doctors' communicative qualities and patient-oriented skills. To which degree this might be triggered due to phyto-pharmacosemiotic aspects needs to be investigated in a future study.

Schlüsselwörter
Phytotherapie · PEK · Beobachtungsstudie · Grundversorgung · SF-36 · EUROPEP · Pharmakosemiotik

Zusammenfassung
Hintergrund: Daten zum Gebrauch der Phytotherapie in der ärztlichen Grundversorgung sind rar und kaum vergleichbar (z.B. unterschiedliche Gesundheitssysteme, Studiendesigns). **Fragestellung:** Gibt es in der Schweiz Unterschiede hinsichtlich Demografie, Praxisstruktur, Behandlungsprozess und Behandlungsergebnis zwischen Ärzten in der Grundversorgung, die in Phytotherapie zertifiziert sind (CAM), und konventionellen Grundversorgern (COM) und ihren jeweiligen Patienten? **Methoden:** Subgruppenanalyse der Daten zur Phytotherapie aus der Beobachtungsstudie (2 Querschnittsbefragungen mit 3 Fragebögen) im Rahmen des Programms zur Evaluation der Komplementärmedizin (PEK). Der Vergleich der Daten erfolgt mit beschreibender Statistik. **Ergebnisse:** An Befragung A nahmen 20 CAM- und 191 COM-Ärzte teil. Davon beteiligten sich 14 bzw. 84 Ärzte an Befragung B, wobei sie je nach Fragebogen mindestens 276 CAM- und 1395 COM-Patienten rekrutieren konnten. Es zeigt sich, dass CAM-Ärzte weniger technische Geräte (z.B. Röntgengeräte) als COM Ärzte besitzen, ihre Konsultationszeit 25% länger ist und sie mehr nichtmedikamentöse Behandlungen einsetzen. Während sich im SF-36 kein Unterschied im Behandlungsergebnis fand, zeigte der EUROPEP ein besseres Ergebnis bei CAM-Patienten. **Schlussfolgerungen:** Die vorläufige Analyse der Daten zeigt im Vergleich von CAM- und COM-Ärzten wenige Unterschiede hinsichtlich demografischer Daten oder Praxisstruktur. Jedoch wirken sich Unterschiede im Behandlungsprozess, offenbar durch Patientenorientierung und kommunikative Qualitäten der CAM-Ärzte, positiv auf die Patientenzufriedenheit aus. Inwiefern phytopharmakosemiotische Aspekte eine Rolle spielen, müsste in einer weiteren Studie untersucht werden.

KARGER

Fax +49 761 4 52 07 14
E-mail Information@Karger.de
www.karger.com

Accessible online at:
www.karger.com/fok

Dr. med. Jörg Melzer
Institute of Complementary Medicine
Department of Internal Medicine, University Hospital Zurich,
Raemistrasse 100, CH-8091 Zurich, Switzerland
Tel. +41 44 255-2460, Fax -4394
E-mail joerg.melzer@usz.ch

Introduction

In the past decades, the Swiss health care system underwent changes regarding the development of alternative and complementary medicine (CAM) provided by physicians, and some of these especially affected phytotherapy: (1) in 1988, the foundation of the Swiss Medical Association for Phytotherapy (Schweizerische Medizinische Gesellschaft für Phytotherapie – SMGP), which is a founding member of the European Scientific Cooperative on Phytotherapy (ESCOP) [1]; (2) in 1990, the start-up of a certification program in phytotherapy for physicians by the SMGP [2]; (3) in 1994, the set-up of a chair and an institute of complementary medicine at the University of Zurich – focusing on research in phytotherapy [3]; (4) from 1999 on, an increasing inclusion of herbal preparations into the specialty list if efficacy, cost efficiency and utility are given ('Spezialitätenliste' [4]), and coverage by basic health insurance.

In 1999, the Swiss Medical Association (Federatio Medicorum Helveticorum – FMH) accredited certificates to physicians for the qualification programs ('Fähigkeitsprogramme') of some Swiss CAM organisations, like anthroposophic medicine, homeopathy and neural therapy. But the qualification program of the SMGP for phytotherapy was not certified by the FMH, for political reasons. It was argued that, in fact, any Swiss physician can prescribe herbal medicinal products (HMP) licensed by Swiss health authorities (Swissmedic, Federal Office of Public Health) without the need of any certificate in phytotherapy. For Chinese herbal medicine (TCM), no FMH certificate or single training course was available. But as Chinese herbal medicine is somehow part of the FMH-certified training course for acupuncture (TCM), this course was accepted as kind of an equivalent qualification.

Despite these differences in accreditation of CAM certificates, a nationwide program on the evaluation of complementary medicine (PEK) was released in Switzerland. Therefore, the Swiss government founded a steering group and a scientific review board to organize the evaluation and the set-up of research strategies and methods to be used. Institutions were chosen to put the PEK into practice in cooperation with the steering group [5]. Each of the 5 CAM methods (anthroposophic medicine, Chinese herbal medicine, homeopathy, neural therapy, and 'Western' phytotherapy – that is phytotherapy based on European cultures) were to be evaluated on 3 levels: (1) by a literature review to give an overview of CAM practice in Switzerland as well as to gain estimates on efficacy and costs (partly published in HTAs [6–8]) or systematic reviews [9–12]; (2) by an observational study with 2 surveys (and 3 questionnaires: physician questionnaire, physician-patient questionnaire, patient questionnaire) in outpatient clinics (partly published [13–15]); (3) by a clinical trial to evaluate efficacy and safety of treatments – which did not take place [6].

To date, only few studies focusing on the evaluation of efficacy of phytotherapy in primary care are available worldwide. Mostly, they examine patients' characteristics [16–18] and seldom those of physicians [19]. A comparison of the existing studies is hardly possible, due to the differing health care systems, study designs and cultures where phytotherapy was used.

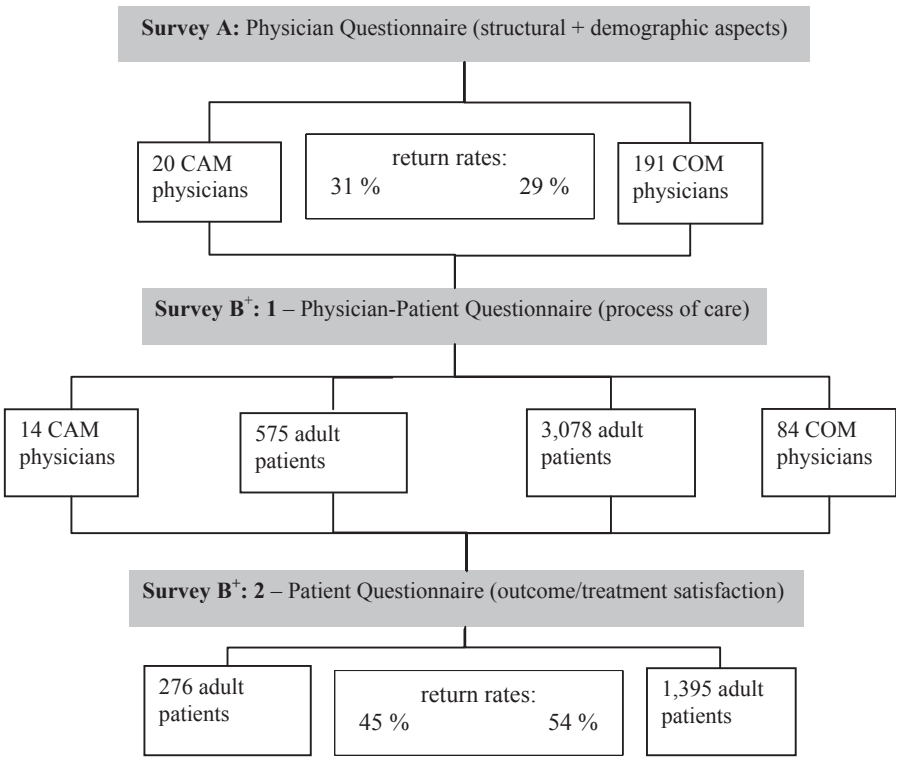

Fig. 1. Flowchart on the sampling for the 2 cross-sectional surveys (CAM physicians = physicians additionally certified in phytotherapy; COM physicians = physicians without a certificate in phytotherapy ('conventional' physicians); + = number of participating patients vary depending on questionnaires and questions).

Therefore, the aim of the present paper is to give a first overview of the use of phytotherapy by primary care physicians in Switzerland (i.e. demographic data, practice structure, process of care and outcome/treatment satisfaction). For this reason, we analyzed the subset of data on phytotherapy from the PEK study [20], because in the previous publications the data are included in a larger group of non-certified CAM physicians [13–15], that is to say not certified by the FMH.

Methods

Study Design

The data of the observational study with 2 cross-sectional surveys containing 3 questionnaires, were collected in practices of primary care providers in Switzerland and were provided by the Swiss Federal Office of Public Health (BAG) [21] after the study was performed by the Institute for Evaluative Research in Orthopedic Surgery (IEFO), Bern. The study focused on aspects of practice structure, demographic data of physicians and patients, process of care, and outcome/treatment satisfaction [22]. Physicians additionally qualified in phytotherapy (CAM physicians) were compared with physicians providing only conventional medicine (COM physicians), and so were their respective patients (fig. 1). For sampling, a list of CAM physicians was obtained from the SMGP, and a random sample of COM physicians (who declared not to use CAM and who were not listed as members of CAM medical associations) was obtained from the FMH. To be included, physicians had to work in primary care (e.g. general practitioners) for ≥2 days a week. To have more robust data for this subgroup analysis, we decided to include all COM physicians involved in the main study [13], which accounts for the obvious difference in numbers of CAM and COM participants (see fig. 1). The 2 consecutive surveys of the study covered the following aspects:

Survey A – Physician Questionnaire: To investigate *structural aspects* of the physicians' practices and *demographic data* about physicians themselves, a questionnaire covering 9 sections with predominantly closed questions was used. The questionnaire with an accompanying letter explaining the purpose of the trial was mailed to the physicians in summer 2002. A reminder letter was sent to non-responders 1 month later. Additional qualitative data about the philosophy of care (open questions – data not shown) have not been analyzed for phytotherapy so far [14].

Survey B – (1) Physician-Patient Questionnaire: To gain information about the *process of care,* CAM and COM physicians taking part in survey A were asked to also participate in survey B. The patients' questionnaire contained closed questions about demographic data, as well as self-rating of health status, and an open question about the severity of the symptoms. The physicians' questionnaire contained closed questions about the diagnostic procedure used with each individual patient, classification of the main diagnosis, therapeutic procedure, sick leave, and consultation time.

Physicians and their staff were instructed to sample consecutive patients consulting their practices at 4 given days during a 12 months period in 2002/03 (winter, spring, summer and fall). Sampling days were defined by the study coordination (IEFO) and were distributed equally across week days. Patients were informed about the study by leaflets and were asked to fill in the questionnaires prior to consultation. Physicians were asked to document the respective consultation but were not aware of the patients' answers.

Survey B – (2) Patient Questionnaire: Outcome/treatment satisfaction was measured using a questionnaire mailed to patients 3–4 weeks after part 1 of survey B in 2003/04. The questionnaire contained 2 validated instruments (SF-36 [23] and EUROPEP – European task force on patient evaluation of practice [24, 25]) – and 1 list of closed questions, not validated (e.g. treatment expectations, side effects).

In 4-lingual Switzerland, all questionnaires were provided in French, German or Italian, depending on the physicians' and patients' mother tongue. All questionnaires were developed or chosen in close cooperation with the PEK steering group and an expert group of Swiss primary care providers specialized in COM and CAM. All participants cooperated on a voluntary basis, and physicians were compensated with 500 CHF (330 EUR). The Bern ethics committee did not raise any objections to this study.

Data Management and Data Analysis

Data were recorded by the IEFO using a relational database. Forms filled in by patients and physicians were coded and recorded manually. A team of 3 persons (2 physicians, 1 pharmacist) coded the main diagnoses and all co-morbidities, according to the international statistical classification of diseases (ICD-10) and related health problems. In the case of differing classifications, team consent was found. Questionnaires mailed to patients 1 month after the initially recorded consultations were designed as machine-readable and were recorded by the Swiss Federal Office of Information Technology, using Optical Character Recognition procedures.

Subgroup analysis of the data concerning phytotherapy from the observational study was performed in a descriptive way using tables and graphs (i.e. mean, 95% confidence interval (CI). Next to this a multivariate linear model (e.g. adjustment for age, sex, or physician's practice) was additionally used for the sum scores of the EUROPEP ($p < 0.05$). SAS 9.1 (SAS Institute Inc., Cary, NC, USA) was used for all calculations.

Results

At the time the observational study took place, only a small number of CAM physicians were certified in phytotherapy which can explain the difference in numbers (almost 10 times as many COM physicians as CAM physicians participated). Therefore, we regard the following results as preliminary.

Survey A – Physician Questionnaire: The sample contained 20 primary care providers for CAM (additionally certified in phytotherapy) and 191 for COM (table 1). The only significant *demographic* difference between these 2 groups was the lack of French-speaking and Italian-speaking CAM physicians. This is not surprising, because up to 2003, the SMGP only ran German training courses in phytotherapy. With regard to *structural aspects*, the practices of CAM physicians were significantly less equipped with X-ray facilities than those of COM physicians (table 2).

Survey B – (1) Physician-Patient Questionnaire: Of the physicians participating in survey A, 14 CAM and 84 COM physicians also took part in survey B and recruited max. 575 and 3,078 adult patients, respectively (fig. 1). A rate of return of questionnaires was not registered as the survey took place in the physicians' practices, without a recording of patients' denial to participate. As to patients' *demographic data*, it could be seen that the total number of male CAM patients was lower than that of male COM patients (table 3). Not surprisingly, the language differences found among physicians were similar to those among patients. Nevertheless, there were some French-speaking and Italian-speaking patients.

Table 1. Demographic data of physicians– survey A

	CAM sample n (%) [CI]	COM sample n (%) [CI]
Physicians, total	20 (100) [–]	191 (100) [–]
Age, years, mean	52.9 (median 55.0)	52.5 (median 54.0)
Language		
– German	20 (100) [100–100]	126 (66) [59.2–72.7]
– French	–	61 (31.9) [25.3–38.6]
– Italian	–	4 (2.1) [0.0–4.1]
Sex		
– Male	16 (80) [62.3–97.7]	167 (87.4) [82.7–92.2]
– Female	4 (20) [2.3–37.7]	24 (12.6) [7.8–17.3]
Years since graduation, mean	21.7 (median 22.5)	23.2 (median 24)
Workload, hours, mean	50 (median 50.6)	53.7 (median 55)

CI = 95% confidence interval; n = number.

Table 2. Structural data regarding physicians' practices – survey A

	CAM sample n (%) [CI]	COM sample n (%) [CI]
Type of practice		
– Single	15 (78.9) [60.5–97.4]	133 (69.6) [63.1–76.2]
– Group with SB	3 (15.8) [0.0–32.3]	43 (22.5) [16.5–28.5]
– Group with PB	1 (5.3) [0.0–15.4]	15 (7.9) [4.0–11.7]
Equipment		
– Lab	17 (85) [69.2–100]	183 (95.8) [92.9–98.7]
– ECG	17 (85) [69.2–100]	186 (97.4) [95.1–99.7]
– X-ray	9 (45.0) [23.0–67.0]	155 (81.2) [75.6–86.7]
– Sono	6 (30.0) [9.8–50.2]	50 (26.2) [19.9–32.5]
Staff		
– Secretary	6 (30) [9.8–50.2]	57 (29.8) [23.3–36.4]
– Assistant	16 (80) [62.3–97.7]	185 (96.9) [94.4–99.4]
– Lab assistant	4 (20) [2.3–37.7]	37 (19.4) [13.7–25.0]
– Therapist	4 (20) [2.3–37.7]	7 (3.7) [1.0–6.4]
Localization		
– Inner city	11 (55) [33.0–77.0]	66 (34.6) [27.8–41.4]
– Agglomeration	5 (25) [5.9–44.1]	78 (40.8) [33.8–47.9]
– Segregated city	–	5 (2.6) [0.3–4.9]
– Rural area	4 (20) [2.3–37.7]	42 (22) [16.1–27.9]

Lab = laboratory; PB = pooled billing; SB = separate billing; sono = ultrasound.

Patients' self-rating of their *general health* was similar in the adult populations in both groups when the answers were dichotomized according to 'excellent, very good, good' versus 'less good, bad'. The same holds for the severity of the main health problem (table 4).

Diagnostic procedures did not differ in the frequency of their use, neither regarding technical approaches (e.g. laboratory or radiological tests) nor regarding personal approaches (e.g. anamnesis, physical examination) (table 5).

Table 3. Demographic data regarding all patients – survey B

	CAM sample n (%) [CI]	COM sample n (%) [CI]
Patients, total	616 (100) [–]	3263 (100) [–]
Age, years		
– ≤16 (children), n	41 (mean 8.8, median 7.5)	185 (mean 10.9, median12)
– >16 (adults), n	575 (mean 50.9, median 51)	3078 (mean 52.0, median 52)
Sex		
Male, total	236 (38.3) [29.0–47.6]	1418 (43.5) [53.4–59.7]
– Children	19 (46.3) [34.0–58.7]	74 (40.0) [33.5–46.5]
– Adults	217 (37.7) [28.2–47.3]	1344 (43.7) [40.4–46.9]
Female, total	380 (61.7) [52.4–71.0]	1845 (56.5) [53.4–59.7]
– Children	23 (53.7) [41.3–66.0]	111 (60.0) [53.5–66.5]
– Adults	358 (62.3) [52.7–71.8]	1734 (56.3) [53.1–59.6]
Mother tongue, total		
– German	527 (85) [77.4–92.6]	1841 (56.2) [46.3–66.1]
– French	9 (1.5) [0.5–2.4]	879 (26.8) [17.8–35.9]
– Italian	43 (6.9) [0.0–14.5]	287 (8.8) [3.8–13.7]
– Other	41 (6.6) [4.4–8.8]	271 (8.3) [6.8–9.7]
Higher education		
– Adults	102 (17.8) [11.2–24.4]	603 (19.9) [17.7–22.2]

Table 4. Patients' self-rated health status (all patients) – survey B

	CAM sample n (%) [CI]	COM sample n (%) [CI]
General health		
– Bad / less well[a]	140 (25.0) [20.8–29.1]	724 (23.9) [21.6–26.3]
Main health problem		
– Rating (severe)[b]	135 (26.1) [19.5-32.7]	565 (21.1) [18.9-23.2]

[a]Rating: excellent, very good, good, less well, bad.
[b]Rating: minor, moderate, severe.

Table 5. Physicians' diagnostic procedure and participating patients' rating of health status – survey B

	CAM sample n (%) [CI]	COM sample n (%) [CI]
Patients, total[a]	579 (100) [–]	3094 (100) [–]
Diagnostic procedure[b]		
– Aanamnesis	76 (82.2) [73.4–91.0]	2688 (86.9) [83.3–90.5]
– Examination	387 (66.8) [57.5–76.2]	2430 (78.5) [75.3–81.8]
– X-ray / sono	40 (6.9) [2.8–11.0]	188 (6.1) [4.8–7.3]
– Lab test / ECG	131 (22.6) [17.2–28.0]	741 (23.9) [21.5–26.4]
Main health problem		
– Rating (severe)	113 (21.2) [8.4–34.0]	280 (10.1) [8.5–11.7]

[a]The numbers of patients differ from those in table 3 and 4 because of different numbers of participants, change of age (e.g. children became adults) or because physicians did not fill in a form for each participating patient in this part of survey 2.
[b]Multiple answers possible.

Table 6. Physicians' classification of the main diagnosis (after coding according to ICD-10) and number of co-morbidities of participating patients – survey B

	CAM sample n (%) [CI]	COM sample n (%) [CI]
ICD-10		
– M. Musculoskeletal system	108 (18.7) [14.8–22.5]	496 (16.0) [14.3–17.8]
– I. Circulatory system*	49 (8.5) [5.3–11.6]	488 (15.8) [14.1–17.4]
– J. Respiratory system	53 (9.2) [6.9–11.4]	331 (10.7) [9.4–12.0]
– F. Mental/behavioural disorder	61 (10.5) [5.7–15.4]	266 (8.6) [6.8–10.4]
– K. Digestive system	35 (6.0) [3.5–8.6]	189 (6.1) [5.1–7.1]
– E. Endocrine / nutritional	43 (7.4) [5.4–9.5]	171 (5.5) [4.4–6.6]
Number of co-morbidities		
– 0	280 (48.4) [35.8–60.9]	1288 (41.6) [37.4–45.9]
– 1	195 (33.7) [26.6–40.8]	954 (30.8) [28.7–32.9]
– >1	104 (17.9) [11.1–24.9]	852 (27.5) [23.9–31.1]

Table 7. Therapeutic procedure that physicians chose for the participating patients – survey B

	CAM sample n (%) [CI]	COM sample n (%) [CI]
COM or CAM		
– COM	261 (45.1) [–]	2693 (87.0) [–]
– COM + PT	63 (10.9) [–]	14 (0.5) [–]
– PT	41 (7.1) [–]	8 (0.3) [–]
– PT + CAM	10 (1.7) [–]	–
Drug or non-drug		
– Drug	225 (38.9) [27.4–50.4]	1668 (53.9) [50.5–57.3]
– Non-drug	184 (31.8) [21.7–41.8]	536 (17.3) [15.2–19.4]
– Both	117 (20.2) [12.5–27.9]	566 (18.3) [15.1–21.5]
– None	53 (9.2) [5.9–12.4]	324 (10.5) [8.4–12.5]
Work incapacity	51 (11.7) [6.7–16.7]	319 (14.2) [12.1–16.2]
Consultation, min, mean*	23 (median 20)	16.9 (median 15)

* $p < 0.05$ CAM versus COM (multivariate linear or logistic model).

Physicians' rating of the frequency of the main diagnosis did not differ between the 2 groups, except for diseases of the circulatory system (table 6). In both groups, 60% of all main diagnoses fall into the same 6 ICD-10 categories. The number of co-morbidities was not significantly different between COM and CAM patients but amounted to more than 50% in both groups (table 6).

Investigation of the therapeutic procedures indicates that in both groups mostly COM methods were used, but CAM physicians used phytotherapy as an additional treatment significantly more often than COM physicians. Phytotherapy alone was used by CAM physicians in 7.1% of the cases, in combination with COM therapies in 10.9%, and in combination with other CAM methods only in 1.7% (table 7).

A significant difference can be seen with regard to drug and non-drug therapy, with the latter being used significantly more often by CAM physicians (table 7). A closer look at the subset of non-drug therapies revealed that counseling is at the top of the list of non-drug therapies in both groups of physicians. Yet, the consultation time was found to be 5 min longer in the CAM physician group.

Survey B – (2) Patient Questionnaire: The return rate of the questionnaires mailed 1 month after the second survey was 45% (n = 276) in CAM patients and 54% (n = 1,395) in COM patients (fig. 1). Yet not all patient questionnaires could be analyzed or provided answers to all questions. This accounts for the lower number of patients. As to outcome, the SF-36 revealed no differences, neither regarding the patients' physical nor their mental health status (table 8). The EUROPEP, on the other hand, showed significant differences in favor of CAM physicians, with regard to the sum scores of the category 'relation and communication' in terms of the CI and additionally for 'medical care' as well as 'information and support' in the multivariate or logistic analysis (table 8). The additional questions about treatment expectation, satisfaction and side effects showed similar results in both patient groups.

Discussion

In the papers published so far about the Swiss PEK, results regarding four CAM methods (except phytotherapy), seen as one group (CAM), were compared to COM data [13–15]. This comparison revealed some differences between CAM and COM in general. It was the aim of the present paper to perform a subgroup analysis of the data of physicians certified in phytotherapy. Of course, such a task is faced with limitations. Above all, the sample size is much smaller, which might be a critical restriction regarding some questions. However, this might only affect the number of CAM physicians. To cope with this, we decided to do a descriptive analysis, so as not to overcharge the results, which we ourselves interpret as a kind of preliminary data providing an overview of at least some aspects of phytotherapy in primary care in Switzerland. The forte of the present study is that it interviewed both physicians (all trained in phytotherapy according to the same curriculum) and their very patients by linking two surveys.

Table 8. Patients' rating of outcome: SF-36, EUROPEP, additional questions – survey B

	CAM sample	COM sample
Patients, total	289	1450
SF-36, participants, n	170	903
– Physical score, points, mean	48.8	47.9
– Mental score, points, mean	50.1	47.8
EUROPEP[a], participants, n	276	1395
	n (mean %) [CI]	n (mean %) [CI]
Relation and communication (answers: 'excellent'), sum*	(72.1) [67.8–76.4]	(64.1) [62.0–66.3]
– Making you feel you had time during consultation?	193 (71.0) [65.6–76.3]	830 (61.5) [57.7–65.3]
– Interest in your personal situation?	189 (70.3) [65.3–75.2]	802 (60.0) [56.8–63.2]
– Making it easy for you to tell him or her about your problem?	182 (70.3) [65.8–74.7]	598 (62.7) [58.7–66.8]
– Involving you in decisions about your medical care?	163 (66.8) [61.9–71.7]	707 (58.3) [54.6–62.1]
– Listening to you?	204 (77.0) [70.8–83.2]	910 (67.2) [64.2–70.2]
– Keeping your records and data confidential?	183 (77.5) [73.4–81.7]	909 (75.2) [72.4–78.1]
Medical care (answers: 'excellent'), sum*	(45.6) [43.5–47.8]	(50.8) [46.4–55.2]
– Quick relief of your symptoms?	64 (28.1) [22.5–33.7]	319 (27.6) [25.0–30.3]
– Helping you to perform your normal daily activities?	116 (50.2) [42.9–57.5]	475 (41.3) [38.4–44.1]
– Thoroughness?	178 (68.7) [63.4–74.0]	729 (56.6) [53.1–60.1]
– Physical examination of you?	125 (57.3) [49.4–65.2]	630 (52.7) [49.8–55.6]
– Offering services for preventing diseases (e.g. screening)	77 (46.4) [39.7–53.1]	460 (49.1) [45.5–52.6]
Information and support (answers: 'excellent'), sum*	(62.3) [57.2–67.3]	(55.6) [53.3–57.9]
– Explaining the purpose of tests and treatments?	151 (62.9) [58.0–67.8]	737 (59.9) [56.7–63.1]
– Telling what you wanted to know about your symptoms / illness?	184 (70.5) [64.4–76.6]	774 (60.1) [57.0–63.2]
– Helping to deal with emotional problems related to health status?	119 (57.5) [51.7–63.3]	538 (49.6) [46.5–52.8]
– Helping to understand to follow his or her advice?	114 (55.9) [49.6–62.2]	576 (51.4) [48.4–54.4]
Continuity and cooperation (answers: 'excellent'), sum	(59.0) [52.8–65.1]	(54.4) [51.7–57.0]
– Knowing what she/he had done or told you during earlier contacts?	123 (58.9) [51.4–66.3]	612 (53.4) [50.0–56.8]
– Preparing you for what to expect from specialists or hospital care?	77 (59.2) [51.6–66.8]	437 (55.7) [51.7–59.7]
Facilities availability and accessibility (answers: 'excellent'), sum	(52.8) [49.5–56.0]	(50.4) [48.9–51.9]
– The helpfulness of the staff?	168 (66.9) [59.2–74.7]	892 (66.5) [62.7–70.2]
– Getting an appointment to suit you?	7 (2.6) [0.5–4.8]	16 (1.2) [06–1.8]
– Getting through to the practice on phone?	189 (71.9) [62.3–81.4]	983 (72.4) [69.2–75.6]
– Being able to speak to the GP on the phone?	140 (70.0) [62.7–77.3]	599 (58.3) [54.5–62.0]
– Waiting time in the waiting room?	104 (39.7) [23.0–56.4]	514 (38.2) [32.7–43.6]
– Providing quick services for urgent health problems?	162 (74.7) [67.7–81.7]	834 (71.5) [68.3–74.7]
Additional questions		
– Fulfilment of treatment expectation (answers: 'completely fulfilled)	94 (34.8) [29.6–40.1]	425 (32.5) [29.2–35.7]
– Side effects (answers: 'yes')	39 (14.2) [8.8–19.6]	197 (15.0) [12.7–17.3]
– Treatment satisfaction (answers: 'completely satisfied')	139 (50.9) [42.0–59.9]	571 (43.3) [40.5–46.2]

[a]EUROPEP contains 23 questions in 5 categories; answers are given on a 5-point scale ranging from 'poor' to 'excellent'. Answers listed here are those for 'excellent' only.
*$p < 0.05$ CAM versus COM (multivariate linear or logistic model).

The previously published cumulative data of the four groups of CAM physicians (i.e. anthroposophic medicine, Chinese herbal medicine, homeopathy, neural therapy) of the observational study within PEK [13–15] allows a comparison with the present data of the subgroup analysis of CAM physicians certified in phytotherapy. The finding, that CAM practices had less technical equipment (e.g. x-ray, ultrasound) [15] could only be confirmed for X-ray facilities in practices of phytotherapists. The main reasons for consultation according to ICD-10 were the same in the previous and the present publication except that circulatory diseases were treated less often by phytotherapists. The most striking difference between CAM and COM physicians in the present study is the consultation time spent with their patients, the difference amounting to 25% (5 min) for physicians certified in phytotherapy. This result matches with another finding of our study, namely that – according to the EUROPEP – patients favored communicative and patient-oriented skills of CAM physicians (phytotherapy), which turned out to have an impact on treatment satisfaction. This may partly explain that CAM physicians prescribed or delivered more non-drug therapies and was found in the previous analysis as well [14]. The present subgroup analysis supports our previous postulate, that patient-orientation and certain communication skills are important elements

in therapeutic settings for CAM [26]. Of course, herbal drugs can surely be described in pharmacological terms. Additionally, they are culturally embedded and individually and subjectively coded for many patients and physicians. Therefore, they seem to offer much more associative and narrative connotations than other modern drugs. This might be a reason why they can play a specific role in story telling between patient and physician [27]. Pharmacosemiotic [28, 29], and in the case of herbal drugs phytopharmacosemiotic, aspects can be therapeutically important and may contribute to treatment benefits. This, however, would have to be studied in a future trial.

Other surveys about the pattern of use of herbal medicine in primary care are hardly comparable with the present study due to different study designs and health care systems: a Brazilian survey that examined more or less the effect of a herbal therapy program meant to bridge lacking basic medical supply [17]; a cross-sectional survey that searched for possible different ethnic patterns of use of herbal drugs in a multiethnic population of a large US-American metropolitan area [18]; or the surveys in a Swedish health center [16] or among general practitioners in Scotland [19] which focused on the concomitant use of herbs.

Conclusions

The preliminary data resulting from the subgroup analysis on phytotherapy from the observational study within PEK shows only few differences between CAM and COM physicians in terms of demographics and practice structure. Yet, patients of CAM physicians showed better treatment satisfaction than those of COM physicians, probably due to communicative and patient-oriented skills and attitudes of the CAM physicians.

Acknowledgments

We thank the Swiss Federal Office of Public Health (BAG) for the possibility to publish the data (Bundesamt für Gesundheit, PEK 2002–2005) presented in this paper.

Competing Interests

The Swiss Federal Office of Public Health funded the study and contract researchers were independent from the founder.
JM, RS and BM are members of the SMGP.

References

1 European Scientific Cooperative on Phytotherapy: ESCOP Monographs. Stuttgart, Thieme, 2003.
2 Schweizerische Medizinische Gesellschaft für Phytotherapie: Reglemente Weiterbildung, vol 7. SMGP, 2007, www.smgp.ch/smgp/smgp.html.
3 Melzer J, Brignoli R, Saller R: [Complementary medicine: phytotherapy and soyaisoflavones as phytoestrogens]. Zentralbl Gynakol 2004;126: 138–47.
4 Bundesamt für Gesundheit (BAG): Spezialitätenliste (SL), vol 2007. BAG, 2007, www.bag.admin.ch/themen/krankenversicherung/00263/00264/00265/index.html?lang=de.
5 Wirz U: Her mit der Komplementärmedizin! Primary Care 2002;2:371–374.
6 Bornhoft G, Wolf U, Ammon K, Righetti M, Maxion-Bergemann S, Baumgartner S, Thurneysen AE, Matthiessen PF: Effectiveness, safety and cost-effectiveness of homeopathy in general practice – summarized health technology assessment. Forsch Komplementarmed 2006;13(suppl 2):19–29.
7 Maxion-Bergemann S, Wolf M, Bornhoft G, Matthiessen PF, Wolf U: Complementary and alternative medicine costs – a systematic literature review. Forsch Komplementarmed 2006;13(suppl 2): 42–5.
8 Kienle GS, Kiene H, Albonico HU: [Anthroposophic medicine: health technology assessment report – short version.]. Forsch Komplementarmed 2006;13(suppl 2):7–18.
9 Shang A, Huwiler-Muntener K, Nartey L, Juni P, Dorig S, Sterne JA, Pewsner D, Egger M: Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy. Lancet 2005;366: 726–32.
10 Nartey L, Huwiler-Müntener K, Shang A, Liewald K, Jüni P, Egger M: Matched-pair study showed higher quality of placebo-controlled trials in Western phytotherapy than conventional medicine. J Clin Epidemiol 2007, DOI: 10.1016/j.jclinepi.2006.
11 Nartey L, Huwiler-Muntener K, Shang A, Liewald K, Juni P, Egger M: Matched-pair study showed higher quality of placebo-controlled trials in Western phytotherapy than conventional medicine. J Clin Epidemiol 2007;60:787–94.
12 Shang A, Huwiler K, Nartey L, Juni P, Egger M: Placebo-controlled trials of Chinese herbal medicine and conventional medicine – comparative study. Int J Epidemiol 2007;36:1086–1092.
13 Busato A, Donges A, Herren S, Widmer M, Marian F: Health status and health care utilisation of patients in complementary and conventional primary care in Switzerland—an observational study. Fam Pract 2006;23: 116–24.
14 Marian F, Widmer M, Herren S, Donges A, Busato A: Physicians' philosophy of care: a comparison of complementary and conventional medicine. Forsch Komplementarmed 2006;13:70–7.
15 Widmer M, Herren S, Donges A, Marian F, Busato A: Complementary and conventional medicine in Switzerland: comparing characteristics of general practitioners. Forsch Komplementarmed 2006;13: 234–40.
16 Al-Windi A: Predictors of herbal medicine use in a Swedish health practice. Pharmacoepidemiol Drug Saf 2004;13:489–96.
17 Silva MI, Sousa FC, Gondim AP: Herbal therapy in primary health care in Maracanau, Ceara, Brazil. Ann Pharmacother 2005;39:1336–41.
18 Kuo GM, Hawley ST, Weiss LT, Balkrishnan R, Volk RJ: Factors associated with herbal use among urban multiethnic primary care patients: a cross-sectional survey. BMC Complement Altern Med 2004;4:18.
19 Ross S, Simpson CR, McLay JS: Homoeopathic and herbal prescribing in general practice in Scotland. Br J Clin Pharmacol 2006;62:647–52; discussion 645–6.
20 Melchart D, Mitscherlich F, Amiet M, Eichenberger R, Koch P: Programm Evaluation Komplementärmedizin (PEK) Schlussbericht. Bern, Swiss Federal Office of Public Health, 2005.
21 Bundesamt für Gesundheit(BAG): PEK 2002–2005. Liebefeld, 2007.
22 Donabedian A: The quality of care. How can it be assessed? JAMA 1988;260:1743–8.
23 Ware J, Kosinski M, Dewey J: How to score version 2 of the SF-36 Health Survey. Lincoln, Quality Metric, 2000.
24 Wensing M: Patients evaluate general practice: a method for assessing and improving care. Nijmegen, SSN, 1997.
25 Grol R, Wensing M, Mainz J, Ferreira P, Hearnshaw H, Hjortdahl P, Olesen F, Ribacke M, Spenser T, Szecsenyi J: Patients' priorities with respect to general practice care: an international comparison. European Task Force on Patient Evaluations of General Practice (EUROPEP). Fam Pract 1999;16:4–11.
26 Melzer J, Saller R: [Does there exist one specific 'view of man' in naturopathy / complementary medicine?]. Forsch Komplementarmed 2006;13: 210–9.
27 Greenhalgh T, Hurwitz B: Narrative-Based Medicine – Sprechende Medizin. Dialog und Diskurs im klinischen Alltag. Bern, Huber, 2005.
28 von Uexküll T: Semiotics and medicine. Semiotica 1982;38:205–215.
29 Schonauer K: Semiotic Foundations of Drug Therapy: The Placebo Problem in a New Perspective. Berlin, de Gruyter, 1994.